

Title (en)
Temperature control system.

Title (de)
Temperaturregelsystem.

Title (fr)
Système de régulation de température.

Publication
EP 0068178 A1 19830105 (EN)

Application
EP 82104940 A 19820604

Priority
JP 8879981 A 19810611

Abstract (en)
[origin: JPS57203940A] PURPOSE:To unnecessitate the adjustment of a temperature control circuit in the renewal of a gas sensor by providing a reference resistance on a gas sensor both for a heater and a bridge circuit in such a manner as to be a constant factor in the resistance value as much as the resistance of the heater in the gas sensor. CONSTITUTION:A reference resistance R2 is provided integral on a gas sensor 30 both for a heater and a temperature controlling bridge circuit. The resistance value of the reference resistance R2 is set at a constant (K) factor as much as the resistance value R4 of the heater. The ratio between the reference resistance of the reference resistance R2 and the resistance R4 of the heater is $R2/R4=K$, hence kept constant. Therefore, the renewal of the gas sensor 30 requires no adjustment of a temperature control circuit 40.

IPC 1-7
G05D 23/24

IPC 8 full level
G01N 27/12 (2006.01); **G01N 27/409** (2006.01); **G05D 23/24** (2006.01)

CPC (source: EP US)
G01N 27/12 (2013.01 - EP US); **G05D 23/2401** (2013.01 - EP US)

Citation (search report)

- [X] EP 0009129 A1 19800402 - SIEMENS AG [DE]
- [X] FR 2126039 A5 19720929 - VARIAN MAT GMBH
- [X] FR 1603599 A 19710503
- [A] FR 2393363 A1 19781229 - THOMAE GMBH DR K [DE]
- [A] EP 0001512 A1 19790418 - FORD MOTOR CO [GB], et al
- [A] GB 2015175 A 19790905 - JOHNSON MATTHEY CO LTD
- [A] JOURNAL OF PHYSICS E, vol. 10, no. 9, September 1977, pages 881-883, London, G.B.

Cited by
US5616835A; CN102681564A; US4954625A; WO9416371A1

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